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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,253	06/30/2006	Roger Green	4990-107 US	1798
26817 7590 07/22/2009 MATHEWS, SHEPHERD, MCKAY, & BRUNEAU, P.A. 29 THANET ROAD, SUITE 201 PRINCETON, NJ 08540				
EXAMINER SHAFFER, RICKY D				
ART UNIT 2872		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/553,253

Applicant(s)

GREEN ET AL.

Examiner

Ricky D. Shafer

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-26, 29-35 and 37-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-4, 6-26, 29-35 and 37-41 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. The restriction requirement set forth in communication mailed on 09/18/2008 is withdrawn. A corrected restriction requirement follows.
2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 2-4, 20 and 41, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the concentrating surface is configured to discriminately collect incident radiation depending on polarization, such that the incident polarization which reaches the second surface has a higher proportion of radiation that is plane polarized than the radiation incident at the first surface.

Group II, claim(s) 6 and 8, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and has an angle of incidence within an acceptance angle to concentrate radiation to the second surface.

Group III, claim(s) 7 and 16, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface

includes a first profile effecting diffusion of emitted radiation and the communication transmitter includes a second profile shaped to concentrate less incident radiation than the first profile.

Group IV, claim(s) 9-12, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the first surface includes a major diameter or dimension and a minor diameter or dimension.

Group V, claim(s) 13, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the first surface is oval or elliptical.

Group VI, claim(s) 14, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the first surface is convex.

Group VII, claim(s) 15, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation, wherein the concentrating surface has a concavely curved portion and the first profile is in the concavely curved portion.

Group VIII, claim(s) 17, drawn to a communication transmitter comprising a

transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the first profile is designed to totally internally reflect.

Group XI, claim(s) 18 and 21, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the first surface or concentrator is rotationally asymmetric.

Group X, claim(s) 19, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the first surface or concentrator is symmetrical about a central plane.

Group XI, claim(s) 22, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the concentrating surface is oval or substantially rectangular.

Group XII, claim(s) 23, drawn to a communication transmitter comprising a transmitter, a narrow band pass filter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein

the concentrating surface includes a first profile effecting diffusion of emitted radiation.

Group XIII, claim(s) 24 and 25, drawn to a communication transmitter comprising a transmitter, a body of optically transmissive material and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the body is delimited by the first, second and concentrating surfaces.

Group XIV, claim(s) 26, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and an anti-reflective coating on the second surface.

Group XV, claim(s) 29, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the transmitter is configured to discriminately emit radiation depending on polarization, such that the emitted radiation leaves the first surface with a higher proportion of radiation that is plane polarized than the radiation emitted by the emitter.

Group XVI, claim(s) 30, drawn to a communication transmitter comprising a transmitter and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and a second profile,

between the first and second surfaces, is shaped to diffuse less radiation than the first profile.

Group XVII, claim(s) 31-35 and 37, drawn to a communication transmitter comprising a transmitter, a photodetector and a concentrator having a first surface, a second surface and a concentrating surface disposed between the first surface and the second surface, wherein the concentrating surface includes a first profile effecting diffusion of emitted radiation and the photodetector is adjacent the second surface.

Group XVIII, claim(s) 38-40, drawn to a communication transmitter comprising an optically transmissive body having first and second ends and a totally internally reflective surface between first and second ends and an optical polarizing filter located between the first and second ends so as to polarizes radiation passing through the body.

NOTE: Claim 1 is a linking claim and will be examined along with any one of the elected Groups I-XVII.

3. The inventions listed as Groups I-VXIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: it appears any special technical feature of the above mentioned inventions relate to the separate features of the particular invention. For each of Groups I-XVIII above, each of the listed groups has special technical features not required for the other listed groups. The special technical features exclusive to each group are listed above in the listing of the groups.
4. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

5. The species are as follows:

- A). The species depicted by Fig. 2a;
- B). The species depicted by Fig. 2b;
- C). The species depicted by Fig. 3;
- D). The species depicted by Fig. 5a and 5b;
- E). The species depicted by figures 6a and 6b;
- F). The species depicted by Fig. 7a, 7b and 7c; and
- G). The species depicted by Fig. 9.

6. Applicant is required, in reply to this action, to elect a single disclosed species consistent with the elected group mentioned above to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

7. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: it appears any special technical features of the above mentioned species relate to the separate features of the particular species. Each of listed Species

above, has special technical features mutually exclusive to each species that are not required by any of the other listed species.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky D. Shafer whose telephone number is (571) 272-2320. The examiner can normally be reached on Mon-Fri. 11:00 to 7:30.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RDS

July 19, 2009

/Ricky D. Shafer/
Primary Examiner
Art Unit 2872